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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,069	09/19/2003	Neil Gilmartin	030206 (BLL-0109)	7662
7590	11/28/2007		EXAMINER	
Philmore H. Colburn II Cantor Colburn LLP 55 Griffin Road South Bloomfield, CT 06002			RECEK, JASON D	
			ART UNIT	PAPER NUMBER
			2153	
			MAIL DATE	DELIVERY MODE
			11/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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<b>Interview Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/666,069	GILMARTIN, NEIL	
	<b>Examiner</b> Jason Recek	<b>Art Unit</b> 2142	

All participants (applicant, applicant's representative, PTO personnel):

(1) Jason Recek. (3) John Young.

(2) Andrew Caldwell. (4) \_\_\_\_\_.

Date of Interview: 26 November 2007.

Type: a) Telephonic b) Video Conference  
c) Personal [copy given to: 1) applicant 2) applicant's representative]

Exhibit shown or demonstration conducted: d) Yes e) No.  
If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 1 and 23.

Identification of prior art discussed: N/A.

Agreement with respect to the claims f) was reached. g) was not reached. h) N/A.

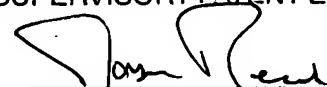
Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Discussed the attached amendments. Examiner indicated they appear to overcome the claim objections and the 101 and 112 rejections.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.



ANDREW CALDWELL  
SUPERVISORY PATENT EXAMINER



Examiner's signature, if required

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.



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FACSIMILE TRANSMITTAL SHEET

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TO: <b>RECEK, Jason D.</b>	FROM: <b>YOUNG, John</b> <i>JY</i>
COMPANY <b>USPTO</b>	DATE: <b>CANTOR COLBURN LLP</b>
FAX NUMBER <b>1 571 270 2975</b>	TOTAL NO. OF PAGES INCLUDING COVER: <b>10</b>
PHONE NUMBER: <b>1 571 270 1975</b>	SENDER'S REFERENCE NUMBER: <b>030206 / BLL-0109</b>
RE: <b>Telephone Interview Request</b>	YOUR REFERENCE NUMBER: <b>10/666,069</b>

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URGENT     FOR REVIEW     PLEASE COMMENT     PLEASE REPLY     PLEASE RECYCLE

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NOTES/COMMENTS: 11/19/2007

**IMPORTANT:** This message is intended only for the use of the individual or entity to which it is addressed, and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering it to the intended recipient, you are hereby notified that reading, disseminating, distributing or copying this communication is strictly prohibited. If you have received this communication in error, please immediately notify us by telephone, and return the original message to us at the below address via the U.S. Postal Service. Thank you.

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Young, John

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To: Jason.Recek@uspto.gov  
Subject: Request for Telephone Interview for Application 10/666,069 (our docket 030206/BLL-0109)  
Response to non-final Office Action Due 12/7/07

Dear Examiner Recek:

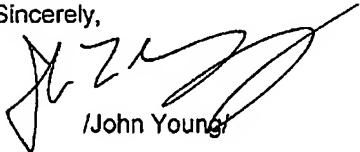
I am sending a request via facsimile and calling to schedule a telephonic interview to discuss our proposed response to overcome the objections and 101 and 112 rejections of the claims as filed in the non-final Office Action mailed 6/7/07.

As an agenda, I would like to discuss claims 1 and 23 as representative claims. Please find attached our proposed claim amendments and proposed remarks.

We would like to schedule the telephonic interview either some time today (i.e., 11/19/2007) or Tue., 11/20/2007 or Wed., 11/21/2007 or a date and time of your convenience before our response due date of 12/7/2007.

Thank you in advance for your consideration of this matter.

Sincerely,



/John Young

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**PROPOSED CLAIM AMENDMENTS AND REMARKS TO OVERCOME  
OBJECTIONS AND 101 AND 112 REJECTIONS FOR APP 10/666,069**

**IN THE CLAIMS:**

1. (Currently Amended) A method for facilitating the design and assignment of Ethernet VLANs, said method comprising:

receiving a VLAN name, a class of service and two or more access ports, wherein a VLAN is a virtual local area network;

determining switches and trunks associated with said access ports;

searching a VLAN database for said VLAN;

creating a VLAN if said searching does not result in locating said VLAN, wherein said creating includes:

selecting a starting access port from said two or more access ports;

mapping a base path from said starting access port to another of said access ports, wherein said base path includes one or more of said switches and one or more of said trunks; and

adding said base path to said VLAN including said starting access port and said another of said access ports; and

for each said two or more access ports not currently located in the VLAN:

mapping a new path from said access port to one of said switches in said VLAN;  
and

adding said new path to said VLAN including said access port; and

transmitting said VLAN to said VLAN database;

adding said new access port to an existing VLAN, if said searching results in locating the existing VLAN, by:

**PROPOSED CLAIM AMENDMENTS AND REMARKS TO OVERCOME  
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determining a list of shortest paths with capacity for said new access port;

performing one of determining a lowest hub value, if there is more than  
one path in the list of shortest paths; and

adding said new access port to the existing VLAN, if there is at least one  
physical path.

23. (Currently Amended) A computer-readable medium having computer-executable instructions program product for facilitating the design and assignment of Ethernet VLANs, wherein the computer-executable instructions when executed by a computer processor cause the computer processor program product to perform a method comprising:

~~a storage medium readable by a processing circuit and storing instructions for execution by the processing circuit for facilitating a method comprising:~~

receiving by the computer processor a VLAN name, a class of service and  
two or more access ports, wherein a VLAN is a virtual local area networks;

determining switches and trunks associated with said access ports;

searching a VLAN database for said VLAN;

creating a VLAN if said searching does not result in locating said VLAN,  
wherein said creating includes:

selecting a starting access port from said two or more access ports;

mapping a base path from said starting access port to another of  
said access ports, wherein said base path includes one or more of said switches and one  
or more of said trunks; and

**PROPOSED CLAIM AMENDMENTS AND REMARKS TO OVERCOME  
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adding said base path to said VLAN including said starting access port and said another of said access ports; and

for each said two or more access ports not currently located in the VLAN:

mapping a new path from said access port to one of said switches in said VLAN; and

adding said new path to said VLAN including said access port; and

transmitting said VLAN to said VLAN database;

adding said new access port to an existing VLAN, if said searching results n locating the existing VLAN, by:

determining a list of shortest paths with capacity for said new access port;

performing one of determining a lowest hub value, if there is more than one path in the list of shortest paths; and

adding said new access port to the existing VLAN, if there is at least one physical path.

**REMARKS**

**Claim Objections**

In item 1, on page 2, lines 8-10 of the Office Action mailed June 7, 2007 (hereafter "Office Action"), claims 1, 19 and 23 were objected to because of lack of antecedent basis in the claims for the recitation "the design" (Office Action, page 2, line 9). Claims 1, 19 and 23 are herein amended to delete the definite article "the" in the recitations "the design". Based on this amendment, claims 1, 19 and 23 are definite. It is respectfully requested that the objection to claims 1, 19 and 23 be withdrawn in the next Office Action.

**PROPOSED CLAIM AMENDMENTS AND REMARKS TO OVERCOME  
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In item 1, on page 2, lines 11-12 of the Office Action, claims 1, 8, 11, 18, 19, 22 and 23 were objected to because "the acronym 'VLAN' is not defined " (Office Action, page 2, lines 11-12). Claims 1, 19 and 23 are herein amended to recite "wherein a VLAN is a virtual local area network". The acronym "LANs" is defined in the original specification as meaning "local area networks" (specification, paragraph [0002]). The acronym "VLAN" is defined in the original specification as meaning "virtual LAN", i.e., meaning a virtual local area network, (specification, paragraphs [0002] and [0003]). Therefore, no new matter has been added herein by amending the claims to recite "virtual local area network". Claim 8, 11, 18 and 22-23 depend from independent claims 1 and 19, respectively; therefore, the instances of the acronym VLANS recited in claims 8, 11, 18 and 22-23 are defined for the same reasons discussed in regard to claims 1 and 19. It is respectfully requested that the objection to claims 1, 19 and 23 be withdrawn in the next Office Action.

In item 1, from page 2, line 13 to line 4 of page of the Office Action, claims 6-7 were "objected to under 37 CFR 1.75 as being substantial duplicates of claims 4-5" (Office Action, page 2, lines 13-14) and based on "a slight difference in wording" (Office Action page 2, line 15) and "according to claim1 a class of service is always present" (Office Action, pag3 3, line 2) and because "nowhere does claim 6 indicate that there is a bandwidth requirement associated with a class of service, only with the access ports" (Office Action, page 3, lines 3-4). This is not the case.

MPEP 706.03(k) provides guidance by distinguishing duplicate claims as having slight differences in wording from non-duplicate claims with different recitations. Claim 6 has a major different wording and meaning with the recitation of "in said class of service" than claim 4 which is silent in regard to a recitation of the "class of service". Thus, with the recitation in claim 6 of "in said class of service", claim 6 further defines and describes a different species of determining in the determination of the "least cost path", including "in said class of service", which is different from the recitation in claim 4 that does not include the "class of service". Furthermore, claim 7 depends from base claim 6 and thus, claim 7 takes on the recitations of claim 6, thus rendering claim 7 distinct from and non-duplicative of claim 5.

**PROPOSED CLAIM AMENDMENTS AND REMARKS TO OVERCOME  
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In regard to "according to claim1 a class of service is always present" (Office Action, page 3, line 2), the alleged always present class of service is one of three components received in the process of "facilitating the design and assignment of Ethernet VLANs" (specification, paragraph [0022], lines 1-2); furthermore, the "class of service" component is a "requested" component (see the original specification, paragraphs [0029] and [0034] associated with calculating HUB VALUES (see, the original specification paragraph [0024], lines 8-9 and FIG. 2, element 214; here in element 214, it is indicated in the specification and FIG. 2 as optional as to whether the HUB VALUE is calculated; therefore, the class of service component may not be requested.

In regard to the allegation in the Office Action that "nowhere does claim 6 indicate that there is a bandwidth requirement associated with a class of service, only with the access ports" (Office Action, page 3, lines 3-4), the Applicant wishes to respectfully advise that claim 6 precisely does indicate that there is a bandwidth requirement associated with a class of service, with the access ports by reciting "determining if each said least cost path in said list has capacity for said bandwidth requirement corresponding to said another of said access ports in said class of service" (claim 6, lines 3-4). For all of the above reasons, it is respectfully requested that the objections of claims 6 and 7 be withdrawn in the next Office Action.

In item 1, on page 3, lines 5 to 13 of the Office Action, claims 12-13 were "objected to under 37 CFR 1.75 as being substantial duplicates of claims 9-10" (Office Action, page 3, lines 5-6). The same arguments apply to claims 12 and 13 as those arguments applied above to claims 6 and 7; thus, for all of the reasons discussed above in regard to claims 6 and 7, claims 12 and 13 are not duplicates of claims 9 and 10 and it is respectfully requested that the objections of claims 12 and 13 be withdrawn in the next Office Action.

In item 1 on page 3 of the Office Action, claim 16 was objected to because of lack of proper antecedent basis. Claim 16 is herein amended to recite "said two or more. . ." as suggested by the Examiner. Therefore, it is respectfully requested that the objection to claim 16 be withdrawn in the next Office Action.

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**Claim Rejections Under 35 U.S.C. § 101**

In item 2 from the last two lines on page 3 to line 7 on page 4 of the Office Action, claim 23 was "rejected under 35 USC § 101 because the claimed invention is directed to non-statutory subject matter" (Office Action, page 4, lines 4-5). Claim 23 is herein amended to recite, in part, "computer-executable instructions when executed by a computer processor cause the computer processor to perform the method" (claim 23, lines 3-4); therefore, claim 23 is now statutory as amended. It is respectfully requested that the rejection of claim 3 under 35 USC § 101 be withdrawn in the next Office Action.

**Claim Rejections Under 35 U.S.C. § 112, Second Paragraph**

Claims 1-18 were rejected under 35 U.S.C. § 112, second paragraph, as indefinite, because:

The majority of the subject matter of claim 1 is directed to creating a VLAN 'if said searching does; not result in locating said VLAN'. The claim becomes indefinite if said searching *does* result in locating said VLAN because the aspects of facilitating the design and assignment of Ethernet VLANs will not be realized. If the searching *does* result in locating the VLAN, only the steps of 'receiving [...]; determining [...]; searching [...]' would be performed. These steps do not amount to facilitating the design of Ethernet VLANs.

(Office Action, page 4, lines 15-21).

Claim 1 is herein amended to recite:

adding said new access port to an existing VLAN, if said searching results in locating the existing VLAN, by: determining a list of shortest paths with capacity for said new access port; performing one of determining a lowest hub value, if there is more than one path in the list of shortest paths; and adding said new access port to the existing VLAN, if there is at least one path

**PROPOSED CLAIM AMENDMENTS AND REMARKS TO OVERCOME  
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(claim 1, lines 18-24). As amended, if the method of searching does result in locating an existing VLAN, then the method performs additional operations associated with adding said new access port to the existing VLAN, where the additional operations include "determining a list of shortest paths with capacity for said new access port . . . [and] performing one of determining a lowest hub value, if there is more than one path in the list of shortest paths" (claim 1, lines 20-22). Therefore, claim 1 is definite as amended; furthermore, examples of the additional operations are illustrated in FIG. 2 and discussed in the original specification in paragraph [0023]:

a loop is performed to add each new access port received at step 202 to the existing VLAN. At step 210, a list of the possible physical paths from the new access port to a switch in the VLAN is created. . . Next, at step 212, it is determined if there is more than one physical path from the new access port to a switch contained in the VLAN. If there is more than one physical path, then step 214 is performed to calculate the total hub value associated with each of these physical paths. At step 216, the path resulting in the lowest total hub value is selected. The new access port is connected to the VLAN via the selected path at step 218

(specification, paragraph [0023]). Dependent claims 2-18 depend from claim 1 and are definite for the reasons discussed in regard to claim 1.

Independent claims 19 and 23 include recitations in a manner similar to claim 1 of "adding said new access port to an existing VLAN, if said searching results n locating the existing VLAN" (claims 19 and 23, lines 25-31 and 22-28 respectively). Dependent claims 20-22 depend from claim 19; therefore, claims 19-23 are definite for the reasons discussed in regard to claim 1.

In item 3 on page 5 of the Office Action, claims 19-23 were rejected 35 USC § 112, second paragraph as indefinite because "claim 19 recites a system and a method of using that system" (Office Action, page 5, lines 7-8).

It is well settled that a functional recitation in a claim "is an attempt to define something by what it does, rather than by what it is (e.g., as evidenced by its specific

**PROPOSED CLAIM AMENDMENTS AND REMARKS TO OVERCOME  
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structure or specific ingredients). There is nothing inherently wrong with defining some part of an invention in functional terms. Functional language does not, in and of itself, render a claim improper. *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971)" (MPEP 2173.05(g)). Functional method recitations contained in a system claim define and modify the system elements of the claim; thus, a functional recitation "is often used in association with . . . a process to define a particular capability or purpose that is served by the recited element" (MPEP 2173.05(g)).

Claim 19 as amended recites "a host system in communication with said network, wherein said host system contains a computer readable storage medium including computer-executable instructions for facilitating design and assignment of Ethernet VLANs, wherein the computer-executable instructions when executed by a computer processor cause the computer processor to perform a method comprising" (claim 19, lines 7-10), the method recitations that follow are merely functional recitations that define and modify the host system. For at least these reasons, claim 19 is not ambiguous and not indefinite. Dependent claims 20-22 depend on claim 19 and are definite for the same reasons discussed in regard to claim 19.

In item 3 on page 5, claim 23 was rejected under 35 U.S.C. § 112, second paragraph because "the ordering of . . . [the] language makes the claim indefinite" (Office Action, page 5, line 11). Claim 23 is herein amended to recite a "computer-readable medium having computer-executable instructions for facilitating design and assignment of Ethernet VLANs, wherein the computer-executable instructions when executed by a computer processor cause the computer processor to perform a method comprising" (claim 23, lines 1-4). It is respectfully submitted that the ordering of the language of the preamble of claim 23 as amended does not make the claim indefinite.

For all of the above reasons, it is respectfully requested that the rejection under 35 USC § 112, second paragraph of claims 1-23 be withdrawn in the next Office Action.